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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	:	**Confirmation No. 7814**
Koji YANAI et al.	:	Docket No. 2002-0451A
Serial No. 10/089,514	:	Group Art Unit 1652
Filed March 29, 2002	:	Examiner Kathleen M. KERR
TRANSFORMANTS PRODUCING SECONDARY METABOLITES MODIFIED WITH FUNCTIONAL GROUPS, AND NOVEL BIOSYNTHESIS GENES	:	Mail Stop: **AMENDMENT**

RESPONSE TO RESTRICTION REQUIREMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Restriction Requirement dated October 7, 2004, Applicants elect with traverse to prosecute the invention of **Group I, claims 1-22 and 26-27**, drawn to transformants with 4-amino-4-deoxychorismic acid synthase (SEQ ID NO: 1).

Applicants respectfully traverse the restriction of claims 1-22 into three groups, i.e., Groups I, II and III based upon the SEQ ID NOs: 1, 3 and 5. In item 3 on pages 2-3, the Examiner indicates think that introducing a single gene (any of SEQ ID NOs: 1, 3 and 5) into a host cell is sufficient for obtaining the claimed transformant. However, this understanding is incorrect.

The transformant of claims 1-22 is characterized in having genes involved in a biosynthetic pathway from chorismic acid to p-aminophenylpyruvic acid. As apparent from claim 8 and the specification, at page 15, lines 14-18, there are three kinds of genes involved in the pathway (the genes encoding 4-amino-4-deoxychorismic acid synthase, 4-amino-4-deoxychorismic acid mutase and 4-amino-4-deoxyprephenic acid dehydrogenase). All three genes must be introduced into a host cell to obtain the claimed transformant. Introducing a single biosynthetic gene into a host cell is not sufficient for obtaining the claimed transformant.

Therefore, in light of the above technical feature, the Examiner should examine claims 1-22 on the premise that three kinds of genes need to be introduced into a host cell to arrive at the prsent invention. Specifically, claims 1-22 should not be divided into three groups.

Furthermore, it would not impose an undue burden on the examiner to search and examine together the inventions of Groups I-III, because doing so would only require a search of three sequences, SEQ ID NO: 1, 3 and 5. Regarding a restriction requirement for nucleotide and/or amino acid sequences, M.P.E.P. § 803.04 states that:

> without creating an undue burden on the Office, the Commissioner has decided *sua sponte* to partially waive the requirements of 37 C.F.R. § 1.141 *et seq*. and permit a reasonable number of such nucleotide sequences to be claimed in a single application...normally ten sequences constitutes a reasonable number for examination purposes. [Emphasis added]

Certainly, the three sequences in Groups I-III of the instant claims fall within this mandate.

Therefore, kindly examine the Groups I-III together.

Favorable action on the merits is solicited

Respectfully submitted,

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